



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,903	01/24/2002	Toshiaki Kanno	100120-00001	4102

7590

10/15/2004

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC  
SUITE 400  
1050 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036-5339

EXAMINER

MERCADO, JULIAN A

ART UNIT PAPER NUMBER

1745

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,903

Applicant(s)

KANNO ET AL.

Examiner

Julian Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2, 5, 6, 10-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1745

## **DETAILED ACTION**

### ***Remarks***

This Office action is responsive to applicant's amendment filed July 29, 2004.

Applicant's election of Group II claims 7-9 in the reply filed on July 29, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Accordingly, claims 1, 2, 5, 6 and 10-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 112***

The rejection of claims 7-9 under 35 U.S.C. 112, first paragraph has been obviated.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. (U.S. Pat. 4,198,382) in view of Snyder et al. (WO 89/07163).

This rejection has been discussed in detail in the previous Office action. With exception to the portion of the amendment submitted to obviate the ground of rejection

Art Unit: 1745

under 35 U.S.C. 112, first paragraph, the patentable scope of claim 7 has not changed from that originally presented. Additionally, the limitations entered into the preamble drawn to the particulars of the electrode material has not been patentable weight as these features do not give breadth or scope to the claimed method, though the teachings of Matsui et al. either singly or in combination with Snyder et al. is considered readable on these limitations.

Applicant's arguments have been fully considered, however they are not persuasive. Applicant submits that the Matsui et al. reference is addressed to eliminate any pores, in alleged contrast to the presently claimed invention, which is addressed to provide numerous pores. However, a closer examination of Matsui et al.'s discussion of the prior art as it pertains to their invention reveals that the patentees equate a "reduced number of pores" with a "low gas permeability". (col. 1 line 49-52, col. 3 line 3-5) While a low gas permeability may be the object of Matsui et al.'s invention, elimination of any and all pores is not fully achieved. The presence of pores is evidenced by the measured permeability of the product, disclosed at  $10^{-6}$  cm<sup>2</sup>/sec. (col. 6 line 22-27) Thus, Matsui et al. is considered to teach or at least suggest the presence of numerous pores, albeit undesirably.

As to the combination of Matsui et al. with Snyder et al., applicant submits that there is no reason for such aggregation as it would change the superior characteristic of Matsui et al. (elimination of pores) for the worse. In reply, the examiner maintains a different reason for combining Matsui et al. and Snyder et al. as being motivated by formation of substantially parallel graphite layers as provided for by the vapor-phase grown carbon fiber process. Snyder et al.'s disclosure has been carefully reviewed but

Art Unit: 1745

absent of specific citations by applicant proving otherwise is not found to teach away from a combination with Matsui et al. insofar as the porosity of Matsui et al. being allegedly affected for the worse.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. and Snyder et al. as applied to claim 7 above, and further in view of Witzke (EP 433507) and Berkebile et al. (U.S. Pat. 4,996,037).

This rejection is maintained for the reasons of record. No arguments are presented against Witzke. Arguments against Berkebile et al. appear to be directed to this reference failing to remedy alleged differences between Matsui et al. and the present claims. However, in view of Matsui et al. and Snyder et al. being maintained for the reasons discussed above, the rejection further in view of Berkebile et al. is subsequently maintained for the reasons discussed in the prior Office action.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

Art Unit: 1745

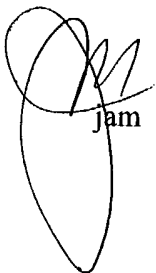
advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

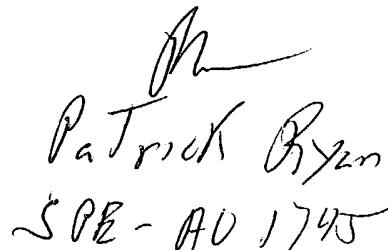
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



Patrick Ryan  
SPE-AD 1745